

NGT\_AH2\_15

# **Plant and Equipment RIIO-2 Asset Health Surveys and FEED**

**Engineering Justification Paper**

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# Table of contents

|          |                                     |          |
|----------|-------------------------------------|----------|
| <b>1</b> | <b>Introduction .....</b>           | <b>3</b> |
| <b>2</b> | <b>Equipment Summary .....</b>      | <b>3</b> |
| <b>3</b> | <b>Site Selection Process .....</b> | <b>3</b> |
| <b>4</b> | <b>Scope and Costs .....</b>        | <b>4</b> |
| <b>5</b> | <b>Conclusion .....</b>             | <b>4</b> |
|          | <b>Appendices.....</b>              | <b>4</b> |

# 1 Introduction

- 1.1 This paper seeks to request funding to commence Asset Health condition assessment surveys and Front-End Engineering Design (FEED) for identified Plant and Equipment (P&E) assets for the first two years (2026/27 and 2027/28) of RIIO-3.
- 1.2 The key driver for this is to be prepared for RIIO-3 with the added benefit of efficient use of resource. The total cost associated with this request is **£1.630m** in 2018/19 price base.
- 1.3 To reduce the risk of delayed investment initiation, NGT proposes to undertake, within the RIIO-T2 period, surveys, Front-End Engineering Design (FEED), Campaign Decision Panels (CDPs) and other pertinent activities to identify potential Asset Health works for the first two years of the next regulatory period (RIIO-3) covering the P&E theme. This covers infrastructure that was either not surveyed or intervened on in RIIO-2 or is included as part of NGT's rolling asset health programme in RIIO-3. The latest view is that there will be circa ████ sites to survey.

# 2 Equipment Summary

- 2.1 On compressor sites and other Above Ground Installations (AGIs) there are specific types of plant and equipment that enable the safe and efficient operation of the National Transmission System (NTS). There are ████ compressor sites and ████ AGIs currently identified within the P&E theme.

# 3 Site Selection Process

- 3.1 A review of all sites and compressor stations on the NTS was undertaken to assess those that were not in any project theme (i.e., not surveyed or proposed for intervention) for RIIO-2 including those in NGT's rolling asset health campaign to bring assets into compliance and remediate deterioration. Those identified are therefore candidates for RIIO-3. The sites currently identified are summarised, through the groupings identified in Table 1. Some sites will be surveyed for multiple subthemes (i.e., pipework, valves, filters, etc).

Table 1: P&E sites identified for survey in RIIO-2 to inform first two years of RIIO-3 interventions

| P&E   | Sites for survey (no.)   |
|---|--|
| All Plant and Equipment sites, covering: <ul style="list-style-type: none"> <li>• Above Ground Pipework, Cladding and CP</li> <li>• Filters, Scrubbers</li> <li>• Preheaters</li> <li>• Pressure Reduction, Flow Control and Slamshut Systems</li> <li>• Valves</li> <li>• Relief valves</li> <li>• CIPS surveys (Pipelines)</li> </ul> | <span style="background-color: black; color: black;">████</span> |
| <b>Total number of sites</b>  | <span style="background-color: black; color: black;">████</span> |

## 4 Scope and Costs

- 4.1 The survey and FEED scope and cost for the [REDACTED] RIIO-2 Plant and Equipment (P&E) assets are consistent with those associated with the inflight RIIO-2 years 4 and 5 P&E assets. The total funding request being made through this paper is £1.630m as summarised in Table 2. Appendix 1 contains the cost book related to this request.

Table 2: Summary funding request

| Description  | Sites to be surveyed | Totals (£m) |
|--|----------------------|-------------|
| Plant and Equipment RIIO-2 Surveys and FEED activities to identify years 2026/27 and 2027/28 RIIO-3 interventions. | [REDACTED]           | 1.630       |

- 4.2 The current assumption is that some surveys and FEED activities will run concurrently and as such the spend is spread equally across the remaining years of RIIO-2 as summarised in Table 3.

Table 3: Proposed phasing (£m)

| 2023/24    | 2024/25    | 2025/26    | Total |
|------------|------------|------------|-------|
| [REDACTED] | [REDACTED] | [REDACTED] | 1.630 |

- 4.3 It must be noted that the P&E AH UM submission is due in January 2024. At that stage it is likely that NGT will have identified more RIIO-3 sites to make a further funding request for RIIO-3 preparatory activities.

## 5 Conclusion

- 5.1 The total funding request being made in this paper is £1.630m (18/19 price base).
- 5.2 The key driver for this forward-looking preparatory work is to be prepared for RIIO-3 with the added benefit of efficient use of resource.
- 5.3 NGT's overarching approach is to define and implement a 10-year cycle of proactive management of which the current rolling asset health program, known as National AGI Renovation Campaign (NARC), is the main mechanism for this.

## Appendices

Appendix 1 – P&E\_RIIO-2\_Survey Plan for RIIO-3 Works\_FINAL

Appendix 2-1: Overarching Summary (Cabs & P&E)